

FACT SHEET

Databases and Related Tools From the Healthcare Cost and Utilization Project (HCUP)

The mission of AHRQ is to improve the quality, safety, efficiency, and effectiveness of health care by:

- Using evidence to improve health care.
- Improving health care outcomes through research.
- Transforming research into practice.

Background

The Healthcare Cost and Utilization Project (HCUP) is a family of health care databases and related software tools developed through a Federal-State-Industry partnership to build a multi-State health data system for health care research and decisionmaking. HCUP is sponsored by the Agency for Healthcare Research and Quality (AHRQ) as part of its mission to improve the quality, safety, efficiency, and effectiveness of the Nation's health care system. This Fact Sheet summarizes current HCUP resources.

Databases

HCUP databases contain a core set of clinical and nonclinical information found in a typical discharge abstract including all-listed diagnoses and procedures, discharge status, patient demographics, and charges for all patients, regardless of payer (e.g., persons covered by Medicare, Medicaid, private insurance, and the uninsured). The information is translated into a

uniform format to facilitate both multistate and national-State comparisons and analyses.

Further details, future updates, and links to all HCUP databases are available at: <http://www.hcup-us.ahrq.gov/databases.jsp>. HCUP databases include:

- **State Inpatient Databases (SID).** The SID contain the universe of inpatient discharge abstracts from data organizations in more than 35 States. Together, the SID encompass over 90 percent of all U.S. community hospital discharges; some States include hospital and county identifiers or discharges from specialty facilities such as psychiatric hospitals. Most SID States make their data available for purchase through the HCUP Central Distributor. Files are now available starting with data year 1990.
- **State Ambulatory Surgery Databases (SASD).** The SASD contain data from ambulatory care encounters in hospital-affiliated



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(and sometimes, freestanding) ambulatory surgery sites in more than 20 States. Most SASD States make their data available for purchase from the HCUP Central Distributor. Files are available beginning with data year 1997.

- **State Emergency Department Databases (SEDD).** The SEDD, HCUP's most recently available databases, contain data from hospital-affiliated emergency department abstracts for visits that do not result in a hospitalization. More than 10 States now participate in the SEDD; a few States make their data available for purchase from the HCUP Central Distributor. Files are available beginning with data year 1999.
- **Nationwide Inpatient Sample (NIS).** The largest all-payer inpatient care database in the United States, the NIS contains data from approximately 7 million hospital stays from roughly 1,000 hospitals; this approximates a 20-percent stratified sample of U.S. community hospitals. NIS data releases are available for purchase from the HCUP Central Distributor for data years beginning in 1988. The number of States in the NIS varies by year.
- **Kids' Inpatient Database (KID).** The KID is the only all-payer inpatient care database for children in the United States. Two years of data from more than 20 States are available for purchase through the HCUP Central Distributor. The 1997 KID contains data for children age 18 and younger; the 2000 KID contains data for children and adolescents age 20 and younger. The 2003 KID is expected in 2005.

HCUP databases come in ASCII format and can be run on desktop computers with a CD-ROM reader. To use the data on the CD set, a statistical software package such as SAS or SPSS is needed. SAS and SPSS users are provided programs for converting ASCII files. Prospective purchasers and all persons with access to HCUP databases are required to read and sign a Data Use Agreement. For details on purchasing the databases, contact the HCUP Central Distributor:

E-mail:	hcup@s-3.com
Phone (toll free):	866-556-4287
FAX:	301-628-3201

Software Tools

AHRQ has developed free software tools that can be used, not only on the HCUP databases listed above, but also with other administrative databases. These tools can be downloaded without charge and include:

- **AHRQ Quality Indicators (QIs).** The AHRQ QIs are measures of health care quality that utilize readily available hospital inpatient administrative data. The AHRQ QIs consist of three modules:
 - *Prevention Quality Indicators* identify hospital admissions that evidence suggests could have been avoided, at least in part, through high-quality outpatient care.
 - *Inpatient Quality Indicators* reflect quality of care inside hospitals including inpatient mortality for medical conditions and surgical procedures.
 - *Patient Safety Indicators* also reflect quality of care inside hospitals, but focus on potentially avoidable complications and iatrogenic events.

More information on the AHRQ Quality Indicators, including downloading instructions, is available at: <http://qualityindicators.ahrq.gov/>.

- **Clinical Classifications Software (CCS).** The CCS aggregates codes from the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) into a smaller number of clinically meaningful clusters that are more amenable to such tasks as developing condition-based profiles of resource use or studying patterns of diagnoses and procedures.

CCS can be applied to all ICD-9-CM data from 1980 to the present, with simple adjustments needed for data years before 1993. The Clinical Classifications Software can be downloaded at: <http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp#download>.
- **Comorbidity Software.** This tool assigns variables that identify coexisting conditions in hospital discharge records using ICD-9-CM diagnosis codes. Two SAS computer programs form the Comorbidity Software. One creates a format library that maps diagnosis codes into comorbidity indicators; the other applies the formats to an administrative dataset. The Comorbidity Software can be downloaded at: <http://www.hcup-us.ahrq.gov/toolssoftware/comorbidity/comorbidity.jsp#download>.

HCUPnet

HCUPnet is a free Web-based interactive service for identifying, tracking, analyzing, and comparing statistics on hospital care. HCUPnet generates statistics using data from HCUP's Nationwide Inpatient Sample, Kids' Inpatient Database, and State Inpatient Databases for those States that have agreed to participate.

HCUPnet also provides statistics based on AHRQ's Patient Safety Indicators that have been applied to the NIS and includes a "Quick Statistics" option that provides ready-to-use tables with commonly requested information. HCUPnet data years are available beginning with 1997. Trend information is available beginning with 1993. HCUPnet can be found at: <http://hcp.ahrq.gov/HCUPnet.asp>.

For More Information

The HCUP User Support Web site at <http://www.hcup-us.ahrq.gov> provides additional information on the HCUP products described above as well as other HCUP resources.

Further details on AHRQ and its programs may be found at <http://www.ahrq.gov/>.





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